Context Injection Research Program

Roadmap v0.4

0. Purpose

The purpose of this roadmap is to record the canonical spine of the research program.

This document is not a forward plan, a list of remaining scientific obligations, or a container for optional future work. Its function is to show the minimum document order required for the corpus to make structural sense as one bounded research contribution.

The roadmap is retained because multiple AI agents and external readers have found that the corpus is easier to understand when its dependency order is stated explicitly.

1. What This Roadmap Is

This roadmap is the spine of the spine.

It exists to show:

- the minimum scientific structure of the corpus,
- the dependency order between its core documents,
- and the role each document plays in the completed program.

The roadmap does not exist to imply that further scientific stages remain incomplete.

2. Canonical Spine

The canonical spine of the research program is:

1. Canonical Glossary
2. Research Thesis
3. Experimental Methodology
4. Replication

5. Failure-Mechanism / Failure-Class Consolidation

This sequence is structural, not chronological. It describes dependency order, not a schedule.

3. Spine Roles

3.1 Canonical Glossary

The glossary freezes vocabulary so later documents do not drift semantically.

Its role in the spine is to stabilize terms such as authority structure, Decision Surface, same-surface change, cross-surface change, invariant-scope enumeration, and related concepts before the claim and method rely on them.

Without the glossary, later documents can still be read, but the corpus becomes easier to misread through synonym drift and informal substitution.

3.2 Research Thesis

The thesis states the object of study, the central claim, the causal variable, the unit of evaluation, the falsifiers, and the non-goals.

Its role in the spine is to define what the work is actually claiming:

- not a coding benchmark,
- not a model ranking exercise,
- not a claim that AI cannot code,
- but a bounded claim about iterative stability, authority structure, and cross-surface invariant preservation under evolving requirements.

3.3 Experimental Methodology

The methodology defines the comparative protocol.

Its role in the spine is to turn the thesis into something runnable by specifying:

- the two workflow tracks,
- the same-surface vs cross-surface distinction,

- the Decision Surface rule,
- the shared invariant requirement,
- and the reporting structure needed to compare outcomes without making the workflow itself the oracle.

This is the document that turns the claim into a method.

3.4 Replication

Replication moves the program from original result to repeated result.

Its role in the spine is to show that the comparison is not resting on a single execution path. Replication establishes that the method can be rerun across additional systems or sessions and still produce evidence interpretable under the same thesis and methodology.

The replication stage includes comparison because repeated runs without comparative judgment do not yet establish what pattern is recurring.

3.5 Failure-Mechanism / Failure-Class Consolidation

Failure-mechanism / failure-class consolidation names the recurring structural pattern supported by the replicated comparison set.

Its role in the spine is to move the program from narrated outcomes to named failure. In the current corpus, that means naming the observed mechanism and the provisional class supported by repeated bounded evidence rather than leaving the work at the level of case-by-case description.

This is the point where the program becomes classifiable rather than merely descriptive.

4. Dependency Order

The dependency order of the spine is:

- the glossary stabilizes the language,
- the thesis states the claim,
- the methodology defines the comparative test,
- replication produces repeated evidence under that test,

- and failure-class consolidation names the recurring structure observed across that evidence.

This order is why the roadmap remains useful. It shows how the documents depend on one another even after the scientific spine is complete.

5. Why the Roadmap Remains

The roadmap remains because the corpus is multi-document and structurally layered.

Readers encountering only one document can usually understand that document locally. What the roadmap provides is the shortest explanation of how the documents fit together as one bounded contribution.

Its purpose is therefore legibility, not planning.

6. Program Boundary

The scientific spine recorded here is complete.

This roadmap should not be read as implying unfinished scientific stages or required future extensions. It exists as a structural index for the completed spine:

- clear vocabulary,
- stated claim,
- runnable methodology,
- replicated comparison,
- named failure mechanism / failure class.

That is the bounded contribution.